

CLAIMS

1. A valve mechanism for use in an inhaler comprising a pressurised container and a metering chamber, the valve mechanism comprising:
 - 5 a first valve member arranged to be positioned between the pressurised container and the metering chamber, the first valve member being movable between a closed position in which the container is closed, and an open position in which the container is open to the metering chamber, the first valve member being biased to remain in the first position by the pressure in the container ; and
 - 10 a second valve member movable between a rest position in which the metering chamber is closed, a metering position in which the valve member actuates the opening of the first valve member to enable a metered dose of medicament to be dispensed into the metering chamber, and an open position in which the metering chamber is open to allow medicament to be inhaled.
- 15 2. A valve mechanism according to claim 1 wherein the first valve member is further biased to remain in the first position by a return spring.
- 20 3. A valve mechanism according to claim 1 or claim 2, wherein the second valve member is arranged to enable the pressure in the metering chamber to assist the opening of the second valve member.
- 25 4. A valve mechanism according to any of claims 1 to 3, wherein a surface at the end of the second valve member that contacts the first valve member during metering of a dose, is a cam surface and the first valve member has a cooperating surface, whereby the dose size can be varied.
- 30 5. A valve mechanism according to any of claims 1 to 3, wherein a surface at the end of the second valve member that contacts the first valve member during metering of a dose is stepped and the first valve member has a cooperating surface, whereby the dose size can be varied.
- 35 6. A valve mechanism according to any of the preceding claims, wherein the second valve member includes a radial seal, and wherein the movements of the first and second valve members are independent of one another.

7. A valve mechanism according to any of the preceding claims, wherein the first valve member is a face seal.
5. 8. A valve mechanism according to any of claims 4 to 6, wherein the end surface of the second valve member allows the size of the dose to be adjusted.
9. A valve mechanism according to claim 1, wherein the cross-section of the first valve member is T-shaped.
10. 10. A valve mechanism according to any of the preceding claims wherein the two valves cannot be opened simultaneously.
11. A valve mechanism according to any of the preceding claims wherein the second valve is breath actuated.
15. 12. An inhaler mechanism incorporating a valve mechanism according to any of the preceding claims connected to a pressurised container.
20. 13. A method of manufacturing an inhaler according to claim 12, the method comprising the steps of:
providing a container to be pressurised closed by the first valve;
inserting medicament into the container through the first valve;
pressurising the container with propellant through the first valve; and
25. attaching a stem and the second valve to form the metering chamber.
14. The method according to claim 9, wherein the second valve is selected from a plurality of valves with different diameter stems.